## IN THE CLAIMS

- 1. (currently amended) A method of screening for therapeutic agents useful in the treatment of a disease emprised in a group of diseases selected from the group consisting of cardiovascular disorders, metabolic diseases, gastrointestinal and liver diseases, cancer disorders, hematological disorders, respiratory diseases, neurological disorders and urological disorders in a mammal comprising the steps of
  - i) contacting a test compound with aPDE1B polypeptide,
  - ii) detecting detect binding of said test compound to said PDE1B polypeptide.
- 2. (currently amended) A method of screening for therapeutic agents useful in the treatment of a disease emprised in a group of diseases selected from the group consisting of cardiovascular dis- orders, metabolic diseases, gastrointestinal and liver diseases, cancer disorders, hematological disorders, respiratory diseases, neurological disorders and urological disorders in a mammal comprising the steps of
  - i) determining the activity of aPDE1B polypeptide at a certain concentration of a test compound or in the absence of said test compound,
  - ii) determining the activity of said polypeptide at a different concentration of said test compound.
- 3. (currently amended) A method of screening for therapeutic agents useful in the treatment of a disease emprised in a group of diseases selected from the group consisting of cardiovascular disorders, metabolic diseases, gastrointestinal and liver diseases, cancer disorders, hematological disorders, respiratory diseases, neurological disorders and urological disorders in a mammal comprising the steps of
  - i) determining the activity of aPDE1B polypeptide at a certain concentration of a

test compound,

- ii) determining the activity of aPDE1B polypeptide at the presence of a compound known to be a regulator of aPDE1B polypeptide.
- 4-11. (canceled)
- 12. (currently amended) A method of screening for therapeutic agents useful in the treatment of a disease comprised in a group of diseases selected from the group consisting of cardiovascular disorders, metabolic diseases, gastrointestinal and liver diseases, cancer disorders, hematological disorders, respiratory diseases, neurological disorders and urological disorders in a mammal comprising the steps of
  - i) contacting a test compound with a PDE1 B polynucleotide,
  - ii) detect binding of said test compound to saidPDE1B polynucleotide.
  - 13. (original) The method of claim 12 wherein the nucleic acid molecule is RNA.
- 14. (original) The method of claim 12 wherein the contacting step is in or at the surface of a cell.
- 15. (original) The method of claim 12 wherein the contacting step is in a cell-free system.
- 16. (original) The method of claim 12 wherein polynucleotide is coupled to a detectable label.
- 17. (original) The method of claim 12 wherein the test compound is coupled to a detectable label.
- 18. (currently amended) A method of diagnosing a disease <del>comprised in a group of diseases</del> selected from the group consisting of cardiovascular disorders, metabolic diseases, gastrointestinal and liver diseases, cancer disorders, hematological disorders, respiratory

diseases, neurological disorders and urological disorders in a mammal comprising the steps of

- i) determining the amount of a PDE1B polynucleotide in a sample taken from said mammal,
- ii) determining the amount of PDE1B polynucleotide in healthy and/or diseased mammals.

19-20. (canceled)

- 21. (currently amended) A pharmaceutical composition for the treatment of a disease emprised in a group of diseases selected from the group consisting of cardiovascular disorders, metabolic diseases, gastrointestinal and liver diseases, cancer disorders, hematological disorders, respiratory diseases, neurological disorders and urological disorders in a mammal comprising a therapeutic agent which regulates the activity of aPDE1B polypeptide, wherein said therapeutic agent is
  - i) a small molecule,
  - ii) an RNA molecule,
  - iii) an antisense oligonucleotide,
  - iv) a polypeptide,
  - v) an antibody, or
  - vi) a ribozyme.
- 22. (currently amended) A pharmaceutical composition for the treatment of a disease emprised in a group of diseases selected from the group consisting of cardiovascular disorders, metabolic diseases, gastrointestinal and liver diseases, cancer disorders, hematological disorders, respiratory diseases, neurological disorders and urological disorders in a mammal comprising a

## PDE1B polynucleotide or a PDE1B polypeptide.

23-26. (canceled)